

PLAN REVIEW CHECKLIST FOR POOL AND SPA FACILITIES

(Revised 12-2007, previous copies obsolete)

Montana DPHHS, Food and Consumer Safety

SWIMMING POOL

This checklist is provided to facilitate department plan review of pool facilities, as required in ARM 37.111.11. Please provide the information requested and complete the appropriate section for the pool facility design. If you answer "no" to a question, explain why, same with "N/A". Use additional paper where necessary.

INCOMPLETE APPLICATIONS WILL GENERATE A REQUEST FOR ADDITIONAL INFORMATION, SLOWING THE REVIEW PROCESS. ONCE A COMPLETE APPLICATION IS RECEIVED, REVIEW SHOULD BE COMPLETED IN 30-45 DAYS.

Plans are to be drawn to scale in sufficient detail to illustrate construction. Plans and specifications for large or municipal projects are to be submitted by the design engineer or architect with their cover letter and be stamped with their seal. Plans shall include:

I. POOL DESIGN PLANS

1. One vicinity sketch noting pool in relation to surrounding area and facilities.
2. Both plan and cross sectional views of the pool. Cross sectional views should provide information on the radius of curvature of the pool at shallow, breakpoint and deep ends of the pool. **THESE SHOULD BE TO A STANDARD SCALE.**
3. Detailed view of the equipment room and equipment within it noting sufficient room is provided to access equipment for proper operation and maintenance, also note location of equipment room drains.
4. Dimensional drawings of pool bottom and sidewalls.
5. Specifications on required equipment components. **INCLUDE NSF LISTINGS IF APPLICABLE ON CHLORINATORS, PUMPS, and FILTERS.**
6. Piping schematic showing piping, pipe size, inlets, main drains, overflow channel or skimmers, vacuum fittings and all other appurtenances connected to the pool piping system.
7. Details on barrier construction.
8. Details on decking dimensions noting slope direction and location of deck drains.
9. Other details as listed in this checklist.

II. GENERAL POOL INFORMATION

Name of facility _____

Location _____

Owner's name _____

Owner's address _____

City _____ ST _____ Phone _____

Pool contractor's name _____

Address _____

City _____ ST _____ Zip _____ Phone _____

Design Engineer/Architect name _____

Address of engineer/architect _____

City _____ ST _____ ZIP _____ Phone _____

Plans stamped? Yes _____ No _____

New pool []; Modification []; Addition []. Outdoor []; Indoor [].

Briefly describe the project i.e. – condo, homeowner's association, public pool, motel, therapy pool, etc

Name of person completing this form: (please print) _____

Signature _____ Date _____

Who should receive the correspondence regarding this plan review: (check all that apply and add contact information if not provided above — name, full address, phone number)

___ Owner

___ Contractor

___ Engineer / Architect

___ Other

Please submit plans, and this checklist to Jerry Cormier, FCSS, 1371 Rimtop Drive, Billings MT 59105; Ph. 406.247.4449

III. SPECIFIC SWIMMING POOL DESIGN CHARACTERISTICS

Pool shape: Rectangular___; Oval___; Kidney___; Other___.

Pool dimensions: Length___, Width___ . Pool Depth range: shallow___, deep___.

Total surface area of pool:_____. Area < 5 ft deep ___ ft.²; Area > 5 ft deep ___ ft.²

Pool capacity _____gallons. Is this figure provided in the plans? _____

Bather Load: Maximum bather load designed for this facility is _____ people.

Name of public water supply serving this pool facility? _____.

Pool surface construction material: Painted concrete [];Plaster[];Fiberglass[];Tile[];Painted Metal[]; Stainless Steel [] Other [] (please specify)_____. Pool color is _____. (must be light color)

Pool decking construction material: _____: Type of non-slip finish provided: _____.

Is slope of deck drainage noted on plans?_____. Note rate of slope_____/ ft. (Min 1/4 "/ft, max 1/2 "/ft.)

Barrier Protection:

Are barriers provided as required by building codes? _____

Note minimum barrier height _____ (inches, feet).

Note type of construction of barrier with information on maximum opening widths to prevent means for access.

Height to access latch is _____ inches.

Is gate or door designed to be self-closing, self-latching? _____.

Are gates or doors lockable for periods of non-use?_____.

Handrails: Provide Specifications and plans for handrails

Stairs:

Are locations of ladders or steps noted on the drawings? _____

Where stairs are provided note:

Height of steps _____in (max 12" height);

width of steps tread _____inches

Is a contrasting color provided on stair tread edge and specified in the plans? _____

Pool floor slopes: What are the pool floor slopes from the shallow depth to 5 feet? _____.

At transition points changing from shallow to deep depths where uniform slopes are not maintained, provide information on the slope change in this transition zone. _____

Do drawings provide information on pool wall to floor interfaces? _____. Are the radius of curvatures noted on the shallow, breakpoint and deep ends of the pool?_____

Diving and slides: Does this pool provide boards, platforms, or have deep areas intended for diving ? _____.

Height of board above water _____ ft/in Length of board _____ft. pool class type: _____

If diving board is used provide information on tread surface, handrails and guardrails in specifications or plans.

Are specifications provided noting the diving area in conformance with the requirements for diving areas_____.

What is being provided around the pool perimeter for handholds? _____

Does pool have: (Y/N)

platforms____, starting blocks____ water slides?_____

Are their locations specified on the plans?_____. Is design specification stipulated to ensure such are installed according to manufacturer's requirements.

If a slide is used, provide all documentation, specifications, and plans from the manufacturer, including conformance with CPSC standards. Slides must be operated according to manufacturer's guidelines.

Recirculation system:

Your pool flowrate is _____ gpm. The Turnover rate is _____ hours. (Show calculations here. Requirement varies by pool type, as per appropriate ANSI standard)

Pump capacity is designed to produce _____ gpm

Provide spec sheet for pump, NSF approval, and a legible copy of pump curve cut sheet.

Is pump above____ or below____ pool water level? How many feet? _____; Total dynamic head?_____

Piping: Is the recirculation system : schedule 40 _____ schedule 80_____

Pump & strainer

Is a pump strainer provided? ____ Is any valving needed and shown to isolate strainer for routine maintenance? ____ Does pump have self-priming capability if above pool water level? ____

Is line size of recirculation system provided on the drawings, with location of all valves to provide for proper maintenance and use of equipment? ____.

Are inlets and outlets of pool located on the plans? ____

Number of inlets? ____ Flow capacity designed for each inlet is ____ gpm.

Number of outlets? ____.

Are a minimum of two main drains indicated on the plans with a minimum spacing of 6 feet? ____.

Specify number of square inches of opening on each main drain. ____ in.².

Specify maximum width of openings on main drain. ____ Maximum of 1/2 inch).

Are the drain(s) anti-vortex design Yes ____ No ____

Do the drain covers meet the ASME/ANSI A112.19.8M standard for suction entrapment and is the drain cover listed as meeting this standard Yes ____ No ____ Provide cut sheet for drain cover. ____ (Y/N-- required)

Determine maximum velocity through main drains assuming 100 % of maximum pump flow is going through the drains. ____ fps Show calculations here or on separate sheet:

Maximum pipe flow through suction or valved discharge lines is ____ fps. Show calculations:

Maximum pipe flow through discharge lines, downstream from any valved areas is ____ fps. Show calculations:

Gutter ☐ skimmer ☐ flow ____ gpm

Is overflow gutter system connected to the recirculation system through a surge tank? ____ (Y/N – Provide plans if yes.)

Do drawings note the location where make-up water is introduced into the swimming pool and how it is protected from backflow? ____ (Y/N).

NOTE: No pipe furnishing water for the make-up supply shall be physically connected to the recirculation system regardless of valve arrangement.

Are pool depth markings provided at the deck and on the sides of the pool? _____. Is spacing of the markings noted? _____. Is spacing adequate? _____.

Are safety (float) lines or marking lines (stripe on pool sides & bottom) provided and shown on the plans at transition point from shallow to deep areas of pools not having uniform slope? _____.

Equipment room: Does drawing of equipment room adequately demonstrate that there is a minimum three foot working area to access equipment for proper operation? _____. Are drains specified in equipment room? _____, lighting (min 20 ft/cdl) _____, ventilation _____, is room secure in non-use hours? _____.

Surge Tank provided? _____ (Y/N) Details on plans? _____

Is the circulation system color-coded or labeled as required in the rules? _____

Note All waste must be disposed of by public sewage system or by sewage disposal system constructed and operated in accordance with Title 75, chapter 6, MCA and ARM Title 17, chapter 38, subchapter 1

No direct connections to sewers shall be permitted; spa drains to sewers shall be air-gapped at point where any sewage can enter the pool or spa piping.

TREATMENT SYSTEM:

Filter: Type: DE _____, Sand _____, Cartridge _____,

Specify if filter is NSF approved? _____. Provide documentation of NSF approval. _____

Number of square feet per filter is _____ SF. Number of filters used _____.

Maximum filter application rate _____ g/SF,

Provide filter specifications.

Are two gauges provided to measure differential pressure across the filter? _____. Are locations noted in plans? ____.

Is a sight glass provided on back wash discharge line? _____

Note location on plans and range of flow-meter in specifications. _____

Are means provided for air relief on filters? _____. If using a separation tank with a DE filter, are instructions provided to warn operator to release air prior to opening? _____

Disinfection:

Type: Chlorine []; Bromine []; Other [] (specify) _____.

Note type of material being fed: gas []; liquid [] (specify) _____; solid [] (specify) _____.

Note number of pounds of disinfectant able to be added per day with the feeding equipment. _____ pounds/day.

Note type of feeding equipment to be installed. _____.

Please provide documentation on chemical feeders

If using gas chlorine:

MUST MEET ALL FEDERAL AND STATE GUIDELINES FOR THE USE OF CHLORINE.

1. Note location of separate sealed room, with door opening to out-of-doors on plans. Note prevailing wind direction in relation to the pool facility (including air intake structures for buildings) and surrounding area.
2. Provide: Sign on door.
3. Mechanical exhaust at one air change per minute, remote or door activated switch to turn on fan, means to exhaust from floor of room, means for make-up air to room across breathing zone of operator, screened chlorinator vent,
4. Note type of breathing protection (self-contained breathing apparatus).
5. Vacuum injection chlorine systems, with vacuum-actuated cylinder regulators, integral backflow and anti-siphon protection at the injector.
6. Taring scales, means for automatic shutoff when pool flow is interrupted, means to store cylinders securely, valve-stem cylinder wrench on cylinders, note size of cylinders to be used.

Chemical feeders: Are feeders provided for controlling pH? _____ (Y/N) Specifications on the feeding equipment attached? _____.

Ventilation: On indoor pools, specify facility will be installed in conformance with accepted standards for pool facilities. Show rate of air exchange. Plans must meet common guidelines such as ANSI/IAF-9 and other ANSI standards.

Testing equipment: Provide information on type of testing equipment provided in conjunction with water quality and chemistry control of pool water (DPD test kit required, preferred type is titration method testing). Does testing equipment provide for testing cyanuric acid if it is used? _____

Chemical storage: Provide information on placement of chemicals, to ensure storage is in conjunction with manufacturer's recommendations.

Restrooms, locker rooms & plumbing fixtures:

1. Note location and size of locker room facility and location and number of plumbing fixtures provided.
2. Note provisions to prevent water temperature in showers from exceeding 110 F..
3. Note location of drains within facility and type of non-slip surface on floor.

Lighting:

1. Provide information on minimum lighting to be provided around the pool & deck, locker room, & equipment room.
2. In facilities with locker rooms and walkway areas, note protective shielding provided on lights.
3. Note specifications on emergency lighting on indoor pool facilities.

Emergency equipment: Note equipment provided including:

- Phone or other emergency medical service response means. (Indicate location)
- First aid kit.
- Backboard with head restraint
- Reaching poles (Shepherd's hook)
- Rescue tube or ring buoy with rope

Lifeguard chairs: (where required).

Signs: Note provisions to provide signage in conformance with regulation. **Provide a copy of the proposed sign.**

Plans for food service: ____ yes ____ no If planned, facilities must compliance with other FCSS requirements.

DEPARTMENT USE ONLY

Received _____ Reviewed by: _____

Letter(s) sent _____

Approval _____

Copy of approval letter attached? _____

Comments:

JC/mf/pools/forms/MT Pool checklist (Rev. 10-2007)